

HIGH POWER SHORT PULSE FIBER LASER

Abstract of the Disclosure

A pulsed laser comprises an oscillator and amplifier. An attenuator and/or pre-compressor may be disposed between the oscillator and amplifier to improve performance and possibly the quality of pulses output from the laser. Such pre-compression may be implemented with spectral filters and/or dispersive elements between the oscillator and amplifier. The pulsed laser may have a modular design comprising modular devices that may have Telcordia-graded quality and reliability. Fiber pigtails extending from the device modules can be spliced together to form laser system. In one embodiment, a laser system operating at approximately 1050 nm comprises an oscillator having a spectral bandwidth of approximately 19 nm. This oscillator signal can be manipulated to generate a pulse having a width below approximately 90 fs.

H:\DOCS\MJG\MJG-5880.DOC
032904